

# Model SC-01

## SINGLE TOXIC GAS MONITOR

### Description

Built around MATHESON's latest smart sensor technology, the SC-01 is a versatile single toxic gas monitor. The smart sensors are interchangeable, with the SC-01 automatically recognizing any sensor change without any set up or configuration changes. The sensor's calibration information also stays with each sensor. Weighing only 7.6 ounces, it has many features which set it apart from the competition. For example, it offers sensors for Ammonia (NH<sub>3</sub>), Arsine (AsH<sub>3</sub>), Carbon Monoxide (CO), Chlorine (Cl<sub>2</sub>), Hydrogen Sulfide (H<sub>2</sub>S), Phosphine (PH<sub>3</sub>), and Sulfur Dioxide (SO<sub>2</sub>). The SC-01's unique extender cable allows the sensor to be attached to the end of a 10 foot cable for remote monitoring and quick response.

The SC-01's large LCD display shows the gas reading, battery level, current time, and will automatically backlight in alarm conditions. Standard alarm types include vibratory, visual, and audible alarms that can be set to latching or self-resetting. Controlled by a microprocessor, the SC-01 continuously checks itself for sensor connections, low battery and circuit trouble. The batteries are simple to replace, requiring no tools to access the battery compartment. One set of AA alkaline batteries provides continuous operation for over 250 hours.

The SC-01 is equipped with datalogging capability as a standard feature which communicates through an IR port with an optional Windows® based datalogging software program. Calibration intervals and reminders are user adjustable and can be set to either go into alarm or to lock the user out of normal measurement mode once a calibration period has expired.



### Features

- Smart interchangeable sensors
- Wide range of toxic gases
- Unique extender cable for remote monitoring
- Compact (2.5 x 5.2 x 1.2 in.)
- Lightweight, 7.6 ounces
- 250 hours of continuous operation
- Operates on 2 "AA" alkaline batteries
- Audible / visual / vibratory alarms
- Datalogging standard
- Impact resistant protective rubber boot
- Intrinsically safe, CSA, C/US classified
- 1 year warranty

### Applications

- Utilities
- Personal monitoring
- Refineries/petrochemical
- Chemical plants
- Hazmat response
- Water/wastewater treatment
- Semiconductor plants



**MATHESON**

ask. . The Gas Professionals™

<b>Sensor Type</b>	ESM-01 smart, plug in style sensors
<b>Detection Principle</b>	Electrochemical
<b>Response Time (T90)</b>	60 Seconds
<b>Sampling Method</b>	Diffusion, optional sensor extender cable
<b>Display</b>	Digital LCD, auto backlight during alarm
<b>Alarm Operation</b>	Latching and reset function
<b>Alarms Types</b>	Gas alarms: 1st, 2nd, STEL, TWA and OVER Trouble alarms: Sensor connection, low battery, circuit trouble, and calibration error
<b>Alarm Methods</b>	Gas alarms: Blinking LED array, intermittent buzzer, blinking gas values, vibratory Trouble alarms: Blinking LED array, quick intermittent buzzer, display of trouble, vibratory
<b>Operating Temp. &amp; Humidity</b>	-10°C to 40°C (14°F to 104°F) Below 95% RH (non-condensing)
<b>Continuous Operation</b>	More than 250 hours (at 25°C, no alarm)
<b>Power Source</b>	2 "AA" Alkaline dry cell batteries
<b>Safety Rating</b>	CSA classified, "C/US", as intrinsically safe. Class I, Division 1, Groups A, B, C, D
<b>Dimension &amp; Weight</b>	2.5" W x 5.2" H x 1.2" D (63 W x 131 H x 31 D mm) 7.6 ounces (215 g)
<b>Case Material</b>	Dust & splash resistant. RFI shielded high impact plastic with protective rubber boot
<b>Controls</b>	Three buttons: POWER, DISPLAY, AIR
<b>Controls</b>	Five buttons: POWER / ENTER, DISPLAY, AIR, RESET, SHIFT (glow in the dark)
<b>Standard Accessories</b>	<ul style="list-style-type: none"> <li>• Alligator clip or belt clip</li> <li>• Impact resistant rubber boot</li> <li>• Manual</li> </ul>
<b>Warranty</b>	One year material and workmanship

## Ordering Information

Model No.	Description
<b>SC-01A-NH3</b>	Toxic gas detector, Ammonia (NH <sub>3</sub> ), 0 - 75.0 ppm, with alligator clip
<b>SC-01B-NH3</b>	Toxic gas detector, Ammonia (NH <sub>3</sub> ), 0 - 75.0 ppm, with belt clip
<b>SC-01A - AsH3</b>	Toxic gas detector, Arsine (AsH <sub>3</sub> ), 0 - 1.50 ppm, with alligator clip
<b>SC-01B - AsH3</b>	Toxic gas detector, Arsine (AsH <sub>3</sub> ), 0 - 1.50 ppm, with belt clip
<b>SC-01A - CO</b>	Toxic gas detector, Carbon Monoxide (CO), 0 - 75.0 ppm, with alligator clip
<b>SC-01B - CO</b>	Toxic gas detector, Carbon Monoxide (CO), 0 - 75.0 ppm, with belt clip
<b>SC-01A - Cl2</b>	Toxic gas detector, Chlorine (Cl <sub>2</sub> ), 0 - 3.00 ppm, with alligator clip
<b>SC-01B - Cl2</b>	Toxic gas detector, Chlorine (Cl <sub>2</sub> ), 0 - 3.00 ppm, with belt clip
<b>SC-01A - HCN</b>	Toxic gas detector, Hydrogen Cyanide (HCN), 0 - 15.0 ppm, with alligator clip
<b>SC-01B - HCN</b>	Toxic gas detector, Hydrogen Cyanide (HCN), 0 - 15.0 ppm, with belt clip
<b>SC-01A - H2S</b>	Toxic gas detector, Hydrogen Sulfide (H <sub>2</sub> S), 0 - 30.0 ppm, with alligator clip
<b>SC-01B - H2S</b>	Toxic gas detector, Hydrogen Sulfide (H <sub>2</sub> S), 0 - 30.0 ppm, with belt clip
<b>SC-01A - PH3</b>	Toxic gas detector, Phosphine (PH <sub>3</sub> ) 0 - 1.00 ppm, with alligator clip
<b>SC-01B - PH3</b>	Toxic gas detector, Phosphine (PH <sub>3</sub> ) 0 - 1.00 ppm, with belt clip

Model No.	Description
<b>SC-01A - SO2</b>	Toxic gas detector, Sulfur Dioxide (SO <sub>2</sub> ) 0 - 6.00 ppm, with alligator clip
<b>SC-01B - SO2</b>	Toxic gas detector, Sulfur Dioxide (SO <sub>2</sub> ) 0 - 6.00 ppm, with belt clip
<b>SC-01A-TOX</b>	Toxic gas detector, without sensor, with alligator clip
<b>SC-01B-TOX</b>	Toxic gas detector, without sensor, with belt clip

## Optional Accessories

Model No.	Description
<b>83-0010RK</b>	Data downloading software
<b>47-1561RK</b>	Extender cable, 10 feet

## SC-01 Replacement Sensors

Model No.	Description
<b>ESM-01R-D-NH3</b>	Sensor, Ammonia (NH <sub>3</sub> ), 0 - 75.0 ppm
<b>ESM-01DH-ASH3</b>	Sensor, Arsine (AsH <sub>3</sub> ), 0 - 1.50 ppm
<b>ESM-011-CO</b>	Sensor, Carbon Monoxide (CO), 0 - 75.0 ppm
<b>ESM-K01-D-CL2</b>	Sensor, Chlorine (Cl <sub>2</sub> ), 0 - 3.00 ppm
<b>ESM-01DH-HCN</b>	Sensor, Hydrogen Cyanide (HCN), 0 - 15.0 ppm
<b>ESM-017-H2S</b>	Sensor, Hydrogen Sulfide (H <sub>2</sub> S), 0 - 100 ppm
<b>ESM-01DH-PH3</b>	Sensor, Phosphine (PH <sub>3</sub> ), 0 - 1.00 ppm
<b>ESM-01DH-D-SO2</b>	Sensor, Sulfur Dioxide (SO <sub>2</sub> ), 0 - 6.00 ppm

